

AMENDMENTS TO THE DRAWINGS

Replacement formal drawings for FIG. 2 have been filed concurrently.

REMARKS

In view of the above amendments and following remarks, reconsideration and further examination are requested.

In response to the objection to the drawings, a new replacement formal drawing, --FIG. 2(b)--, is provided which shows the third line head offset with respect to the second line head but not offset with respect to the first line head. Accordingly, a replacement formal drawing for FIG. 2 has been provided which designates this figure as --FIG. 2(a)--. The specification has been correspondingly amended so as to make reference to FIGs. 2(a) and 2(b). No new matter has been entered by FIG. 2(b).

The title has been changed to --Recording Apparatus With Offset Line Heads--, as suggested by the Examiner.

The specification and abstract have been reviewed and revised to make editorial changes thereto and generally improve the form thereof, and a substitute specification and abstract are provided. As alluded to above, the substitute specification also includes reference to new FIG. 2(b), and thus provides antecedent basis for the claimed subject matter that the third line head is offset with respect to the second line head but not offset with respect to the first line head. No new matter has been added by the substitute specification and abstract.

Claims 1-8 have been cancelled and claims 9-28 have been added. New claims 9-28 have been drafted taking into account the informalities noted by the Examiner in section 4 of the Office Action, are believed to be free of these informalities, and are otherwise believed to be in compliance with 35 U.S.C. § 112, second paragraph.

The instant invention pertains to a recording apparatus including line heads for discharging ink onto a recording medium. Such a recording apparatus is generally known in the art, but suffers from drawbacks as expressed on pages 1-4 of the original specification. Applicants have addressed and resolved these drawbacks by providing a unique recording apparatus.

Specifically, with reference to the figures for example, a first line head 1-K is offset relative to a second line head 1-M in a direction that is perpendicular to a transport direction of recording medium 5 by an amount OS that limits defects of a printed image. That is, the first line head is offset

relative to the second the line head by an amount that is almost equal to a value resulting from dividing a print width of an individual head 2 of the line heads by a total number of different colors of ink to be discharged from the line heads. New independent claims 9 and 17 are believed to be representative of Applicants' inventive recording apparatus.

Claims 1, 2, 4 and 8 were rejected under 35 U.S.C. § 102(b) as being anticipated by Suzuki et al.; claims 1-3, 5, 6 and 8 were rejected under 35 U.S.C. § 102(b) as being anticipated by Matsumoto et al.; and claim 7 was objected to as being dependent upon a rejected base claim, but was indicated to be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. The indication of allowable subject matter is greatly appreciated; however, claim 7 has not been rewritten in independent form, since it is believed that the currently pending independent claims are allowable over the references relied upon by the Examiner.

Please note that new claim 9 basically includes the subject matter added by former claims 5, 6 and 7, and accordingly, the references as applied in rejecting claims 5 and 6 will be discussed as they pertain to claim 9. Suzuki et al. was not used to reject claim 5 or 6, and accordingly, Suzuki et al., will not be discussed with regard to claim 9.

Claim 9 is believed to define around Matsumoto et al. In this regard, claim 9 recites that the print width used to determine the offset amount is "of an individual head of said head lines", which individual head is identified as "2" in the figures, for example. To the contrary, in rejecting claims 5 and 6 over Matsumoto et al., the Examiner equated a width of short head 22 with the claimed "print width", but did not equate the width of an individual head of this short head to the print width. Indeed, Matsumoto et al. includes no discussion and provides no figures demonstrating that the offset amount thereof

is almost equal to a value resulting from dividing a print width of an individual head of said line heads by a total number of different colors of ink to be discharged from said line heads,

as recited in claim 9.

Accordingly, the offset amount as required by claim 9 is not taught or suggested by Matsumoto et al., whereby claim 9 is not anticipated by claim 9. Thus, claims 9-16 are allowable over Suzuki et al. and Matsumoto et al. either taken alone or in combination.

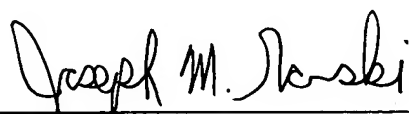
With regard to new independent claim 17, support for this claim can be found on page 13, line 13 through page 14, line 3 of the original specification. The subject matter of claim 17 is not believed to be taught or suggested by either of Suzuki et al. or Matsumoto et al., whereby claims 17-28 are also allowable over these references either taken alone or in combination.

In view of the above amendments and remarks, it is respectfully submitted that the present application is in condition for allowance and an early Notice of Allowance is earnestly solicited.

If after reviewing this Amendment, the Examiner believes that any issues remain which must be resolved before the application can be passed to issue, the Examiner is invited to contact the Applicants' undersigned representative by telephone to resolve such issues.

Respectfully submitted,

Takahiro ESAKI et al.

By: 

Joseph M. Gorski
Registration No. 46,500
Attorney for Applicants

JMG/nka
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
February 1, 2006